

## AMENDMENTS TO THE CLAIMS

Claims 1-3 (Cancelled).

4. (Currently amended) A look-ahead stack management system for configuring a look-ahead state of an operand stack in a computer system capable of out -of-order execution, comprising:

a data file having entries registers each being able to hold data; and

an advanced mapping file having entries registers each being able to hold an entry address a register number in said data file, wherein:

each time a modification is to be made on said operand stack, said advanced mapping file is so managed that, for each entry register of said advanced mapping file that is to hold an entry address a register number in said data file allocated to an operand stack element, the address of the entry number of the register of said advanced mapping file is to indicate the number of operand stack elements over said operand stack element.

5. (Currently amended) A look-ahead stack management system for configuring a look-ahead state of an operand stack in a computer system capable of out -of-order execution, comprising:

a data file having entries registers each being able to hold data; and

an advanced mapping file having entries registers each being able to hold an entry address a register number in said data file, wherein:

each time a modification is to be made on said operand stack, said advanced mapping file is so managed that, for each entry register of said advanced mapping file holding an entry address a register number in said data file allocated to an operand stack element, if the entry register of said advanced mapping file is to hold an entry address a register number in said data file allocated to an operand stack element, the number of operand stack elements over the operand stack element whose value is held / to be held in the entry

register of said data file indicated by the address number held in the entry  
register of said advanced mapping file is to be unchanged.